

Arbovirus Surveillance Program
Massachusetts Department of Public Health
Infectious Diseases Laboratory Division
State Laboratory Institute

Date: September 8, 2000

Twenty-nine additional birds, found dead between August 25 and September 5 were confirmed positive for West Nile Virus (WNV), bringing the total number of positive birds to 103. Six WNV positive birds were found in Brookline; 6 in Boston (2 in Jamaica Plain, 1 in Roxbury, 1 in Brighton, 1 in the South End, and 1 in Dorchester); 5 in Cambridge; 3 in Newton; 2 in Peabody; and one in each of the following towns: Brockton, Millville, Holliston, Hingham, Plympton, Middleboro and Natick.

The total number of WNV-infected birds by location to date is Brookline (36); Boston (22); Newton (8); Cambridge (7), Billerica (3), Holliston (3), Middleboro (3), Peabody (4) and one each from Arlington, Brockton, Framingham, Halifax, Hingham, Hopkinton, Millville, Medford, Natick, Needham, Plympton, Seekonk, South Hadley, Tewksbury, Upton, Waltham and Wellesley. Final test results on a horse from Bedford, that became ill on August 26th, indicate that it was infected with WNV. This is the first equine case of WNV in Massachusetts.

Trapping continued at the sixteen regular long-term sites in Plymouth, Bristol, Norfolk, Middlesex and eastern Worcester Counties. Sites in Brookline and Boston were also trapped. In addition, Mosquito Control Projects throughout the state continue to send in mosquitoes for testing. Over 1800 mosquito pools collected from sites throughout Massachusetts have been tested. Three pools of *Culiseta melanura*, one collected 9/2 in Hanover, one collected on 9/3 in Easton, and one collected 9/3 in Foxboro tested positive for eastern equine encephalitis virus (EEEV). A season total of 6 EEEV isolates have been found in bird biting mosquitoes. One pool of *Aedes triseriatus* collected in Brookline on 9/2 tested positive for WNV. This is the 3rd WNV isolate found in mosquitoes in Brookline and the 4<sup>th</sup> WNV isolate to date. (As previously reported, one WNV isolate was found in mosquitoes trapped in Boston on 8/20.) Samples from one of 2 dead emus from Rehoboth that died on 9/2 tested positive for EEEV. This is the second emu flock with dead birds testing positive for EEEV. To date, 37 emus in Norton where several birds have tested positive for EEEV have died.

Specimens have been submitted from 158 patients. One-hundred and forty-five have tested negative for WNV infections. Thirteen are pending. Weekly arbovirus reports and informational material on WNV and EEEV can be accessed at <a href="http://www.state.ma.us/dph">http://www.state.ma.us/dph</a>.

Total Number of Mosquitoes Analyzed: 22, 593

## **Virus Isolates in Mosquito Pools:**

Virus	Mosquito	Site	<b>Collection Date</b>				
1 HJV	Culex pipiens	Boston	6/29/00				
1 EEEV	Culiseta melanura	Easton	7/23/00				
1 EEEV	Culiseta melanura	Boston	7/24/00				
1 WNV	Culex spp.	Brookline	8/08/00				
1 EEEV	Culiseta melanura	Foxboro	8/14/00				
1 WNV	Culex spp.	Boston	8/20/00				
1 WNV	Culex restuans	Brookline	8/25/00				
1 WNV	Aedes triseriatus	Brookline	9/02/00				
1 EEEV	Culiseta melanura	Hanover	9/02/00				
1 HJV	Culiseta melanura	Hanover	9/02/00				
1 HJV	Culiseta melanura	Carver	9/02/00				
1 EEEV	Culiseta melanura	Easton	9/03/00				
1 EEEV	Culiseta melanura	Foxboro	9/03/00				
1 HJV	Culiseta melanura	New Bedford	9/03/00				

Total: 4 WNV, 6 EEEV, 4 HJV

# Mosquito Surveillance Weekly Test Report

## 09/02/00 to 09/08/00

Mosquito Species \*

Virus in Mosquito Pools\*\*

Site	Cs mel	Cq per	Ae can	Ae vex	Cx pip	Cx other	Other Sp	<b>EEEV</b>	HJV	WNV
Bedford	0	1	0	400	0	21	11	0	0	0
Boston	0	0	0	0	35	278	7	0	0	0
Brockton	55	0	2	0	0	0	0	0	0	0
Brookline	0	0	0	1	0	46	5	0	0	1
Canton	0	0	0	0	0	0	0	0	0	0
Carver	250	0	9	0	0	0	0	0	1	0
Easton	412	0	62	6	0	0	0	1	0	0
Foxboro	52	3	1	1	0	0	0	1	0	0
Greenfield	0	0	0	0	0	0	0	0	0	0
Halifax	350	0	18	0	0	0	0	0	0	0
Hanover	162	0	1	0	0	0	0	1	1	0
Holliston	105	0	4	0	0	0	0	0	0	0
Hopkinton	0	0	0	0	0	0	0	0	0	0
Kingston	95	0	0	0	0	0	0	0	0	0
Lakeville	15	2	0	0	0	0	0	0	0	0
Nantucket	0	0	0	0	0	0	0	0	0	0
New Bedford	112	0	2	0	7	0	0	0	1	0
Northampton	0	0	0	0	0	0	0	0	0	0
Norton	0	0	0	0	0	0	0	0	0	0
Pittsfield	0	0	0	0	0	0	0	0	0	0
Raynham	16	1	1	0	0	0	0	0	0	0
Reading	0	0	0	0	0	0	0	0	0	0
Rehoboth	8	0	0	0	0	0	0	0	0	0
South Hadley	0	0	0	0	0	0	0	0	0	0
Springfield	0	0	0	0	0	0	0	0	0	0
Upton	0	0	0	0	0	0	0	0	0	0
Walpole	18	6	5	0	0	0	0	0	0	0
Westboro	91	0	7	6	0	0	0	0	0	0
Westport	10	0	5	0	0	0	0	0	0	0
Total for DPH	1751	13	117	414	42	345	23	3	3	1

# Mosquito Surveillance CumulativeTest Report 05/31/00 to 09/08/00

	Mosquito Species*						Virus in Mosquito Pools**			
Site	Cs me	Cq per	Ae can	Ae vex	Cx pip	Cx other	Other Sp	<b>EEEV</b>	HJV	WNV
Bedford	0	1	0	400	0	21	11	0	0	0
Boston	1	0	0	0	582	615	7	0	0	0
Brockton	144	24	17	7	18	13	0	0	0	0
Brookline	0	0	0	1	71	64	7	0	0	2
Canton	137	92	27	21	18	14	0	0	0	0
Carver	396	340	30	2	15	4	0	0	1	0
Easton	1063	23	304	11	78	77	1	2	0	0
Foxboro	291	86	54	10	36	9	0	2	0	0
Greenfield	2	2	0	5	42	12	3	0	0	0
Halifax	1185	27	63	4	56	32	12	0	0	0
Hanover	293	7	8	33	16	6	1	1	1	0
Holliston	333	8	86	7	14	23	0	0	0	0
Hopkinton	0	0	1	13	143	341	1	0	0	0
Kingston	375	43	10	3	53	19	0	0	0	0
Lakeville	54	37	7	0	42	20	0	0	0	0
Nantucket	0	0	0	0	76	9	0	0	0	0
New Bedford	639	17	24	6	89	31	1	0	1	0
Northampton	1	3	18	250	30	2	2	0	0	0
Norton	89	2	1	32	177	24	0	0	0	0
Pittsfield	0	0	0	0	89	21	2	0	0	0
Raynham	96	24	22	15	20	13	15	0	0	0
Reading	0	0	0	0	0	55	0	0	0	0
Rehoboth	61	7	65	11	12	4	0	0	0	0
South Hadley	1	1	0	4	236	48	0	0	0	0
Springfield	19	4	7	17	60	35	0	0	0	0
Upton	0	0	0	0	0	57	1	0	0	0
Walpole	158	324	40	80	18	4	8	0	0	0
Westboro	305	33	61	18	62	18	6	0	0	0
Westport	82	1	34	8	2	18	2	0	0	0
Total for DPH	5725	1106	879	958	2055	1609	80	5	3	2

## Mosquito Control Districts Cumulative Test Report though 9/8/00

### Mosquito Species\*

Virus in Mosquito Pools\*\*

	Cs me	Cq per	Ae can	Ae vex	Cx pip	Cx other	Other Sp	<b>EEEV</b>	HJV	WNV
Berkshire County MCD	0	0	0	0	0	0	4	0	0	0
Bristol County MCD	205	3	3	17	950	205	5	0	0	0
Cape Cod MCD	0	0	0	0	0	2899	0	0	0	0
Central MA MCD	0	0	0	0	134	179	3	0	0	0
CMMCP	0	0	0	0	66	253	4	0	0	0
East Middlesex MCD	0	0	2	0	311	1487	5	0	0	1
Essex County MCD	0	0	0	0	81	9	0	0	0	0
NCMCP	0	0	0	0	20	1	1	0	0	0
NCMCP-Westport	0	0	0	0	9	0	0	0	0	0
Norfolk County MCD	0	0	0	0	220	31	0	0	0	0
Northeast MCD	0	0	0	0	11	1	0	0	0	0
Plymouth County MCD	0	7	0	38	197	131	0	0	0	0
Suffolk County MCD  Total forMCD	126 <b>331</b>	250 <b>260</b>	105 <b>110</b>	874 <b>929</b>	830 <b>2829</b>	502 <b>5698</b>	2 <b>24</b>	1 <b>1</b>	1 <b>1</b>	1 <b>2</b>

### \*Mosquito species name abbreviations:

Cs mel = Culiseta melanura

Cq per = *Coquillettidia perturbans* 

Ae can = Aedes canadensis

Ae vex = Aedes vexans

Cx pip = *Culex pipiens* 

### \*\*Virus name abbreviations:

EEEV = Eastern Equine Encephalitis Virus

HJV = Highlands J Virus

WNV = West Nile Virus

Page 3

\*\*\*